ATTACHMENT J02

White Sands Missile Range Potable Water System

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J02 White Sands Missile Range Potable Water System

J02.1 White Sands Missile Range Overview

J02.1.1 History and Development

White Sands Missile Range (WSMR, White Sands or Installation) is a national test range designed to support research, development, testing, and evaluation for the Army, Navy, Air Force, National Aeronautics and Space Administration, and other approved U.S. Government agencies and foreign governments. White Sands also plans and conducts development testing and evaluation of Army missiles, rockets, and materiel systems.

WSMR is located in south-central New Mexico in a region known as the Tularosa Basin between the Sacramento Mountains to the east and the San Andres and Organ Mountains to the west. The Main Post /Headquarters Area are located 20 miles east of Las Cruces, New Mexico and 45 miles north of El Paso, Texas. The Installation boundaries extend almost 100 miles north to south by 40 miles east to west. At almost 3,200 square miles, WSMR is the largest military installation in the country.

The Installation opened on 9 July 1945 as White Sands Proving Ground, and was later renamed to White Sands Missile Range. One week after it's opening, the first atomic bomb was exploded on the Installation at an area known as Trinity Site. Missile testing began in September 1945 with Tiny Tim firings and "took off" with captured German V-2 rockets in 1946. White Sands served as the landing site for the space shuttle Columbia on 30 March 1982, at the range's Northrup Strip.

White Sands has over 840 sets of family quarters. Temporary quarters are usually available for the new families. Civilian personnel are authorized on-base housing, on a space-available basis. Sixty-four units are available for unaccompanied military personnel as well. Today, WSMR is divided into five major areas: Main Post Area, Small Missile Range (SMR), MAR site, HELSTF, and Stallion Range.

J02.1.2 Satellite Locations

Covering almost 3,200 square miles, the range is the largest military Installation in the country. Although still within the boundary of White Sands, the Installation possesses remote/satellite areas/sites/ranges that include the Launch Complex (SMR and MAR site), HELSTF, and Stallion Range. Notwithstanding, the potable water distribution system presently only extends to the Launch Complex (SMR and MAR site), HELSTF, Main Post and Main Post Housing area, and Stallion Range.

J02.2 Potable Water System Description

J02.2.1 Potable Water System Fixed Equipment Inventory

The White Sands Missile Range potable water system and associated treatment facilities consists of all appurtenances physically connected to the potable water system between the points of demarcation separating Government ownership from end-users. The actual inventory of items sold will be conveyed to the Contractor using the Bill of Sale at the time the system is transferred.

The Government reserves the right to connect to the potable water system and use the distribution system for any future requirement that may be built / installed within the Installation boundaries.

The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The description and inventory were developed based on best available record data.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. As described in Paragraph C11.1, *Equitable Adjustment*, if after award the Offeror identifies additional substantial inventory not listed in Paragraph J02.2.1.9, *Inventory*, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in Paragraph J02.2.1.9, *Inventory*, is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment. The intent is not to encourage piecemeal adjustments but rather address significant adjustments that have significant bearing on capital replacement investments.

J02.2.1.1 System Description

The WSMR potable water system and associated treatment facilities consists of all appurtenances physically connected to the distribution system from the well head, to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, pipelines, valves, fire hydrants, ground water wells, water treatment plants (WTP), booster pump stations, water storage tanks, and meters. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. The Offeror shall base the proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description.

Water is supplied exclusively from deep wells in the Tularosa and Hueco Basins in the Main Post Area and the Rio Grande Basin at the Stallion Range Camp. The universal problem of declining static water levels is a particular concern at WSMR because of the close proximity of salt water. The Stallion Range complex also uses well water, which is highly saline and must be treated prior to storage and distribution.

Generally, it must be recognized that potable water, regardless of the quality, is a precious commodity in this water-starved region, especially in view of the burgeoning requirements of the El Paso/Juarez municipalities. The Army is vitally interested in protecting the existing water

rights for the WSMR and Fort Bliss installations; therefore, the water rights are not included as part of this privatization action.

- No water pumped from WSMR wells is available for non-government use.
- The entire current well field shall remain operational and managed in a way that will prevent over pumping in one area. Over pumping can lead to drawing of saline and/or brackish water into the upper layer of fresh water within the aquifer. The pumping management plan shall also take into consideration the need to maintain the overall static water level.

For information and reference only*

(The current well field is over a thin layer of fresh water and the layer of fresh water is over a layer of saline/brackish water that goes down to bed rock. The main reason for the large number of wells in the well field is to alternate pumping so as to not over pump and draw up the saline/brackish water into the fresh water zone. If the saline/brackish water is drawn up into the fresh water zone it will take many years if at all to subside back into a natural level. Also, due to the nature of the aquifer pumping quantities need to be managed so as to not pump more than the recharge rate to the aquifer to maintain the static water level. If the static water level drops the pumping costs increase and the possibility of saline/brackish water intrusion increases. The approximate recharge rate to the main post aquifer is 424 MILLION GALLONS with normal rainfall per year and the recharge rate to the Soledad aquifer is 244 MILLION GALLONS a year with normal rainfall. Another reason is to ensure that we have adequate back up wells incase of contamination, disasters or attack.)

- WSMR, as owner of the water rights, will file a letter of authorization with the appropriate New Mexico Office of the State Engineer (OSE) stating exactly what documents the contractor will be authorized to file with the OSE.
- The contractor will be authorized to file with the OSE in WSMR's name applications to drill new wells, deepen wells, drill supplemental wells, repair wells or maintain wells to withdraw WSMR's appropriated water.

Under the U.S. Army Residential Community Initiative, WSMR's housing will be privatized as of 1 July 2005. Coordination may be required with the new family housing owner regarding easements and system infrastructure redesign.

WSMR has 2004 (in progress) and 2005 (in design) Major Construction Army projects that are not reflected in the inventory due to the premature state of utility data. Upon completion, the newly constructed utility system infrastructure will be transferred to the successful Offeror.

J02.2.1.2 Main Post Area/SMR/MAR

The Main Post, located in the extreme southwest corner of WSMR, covers approximately 1,650 acres and accommodates housing, administrative, and technical facilities. There is a large distance between components in these areas. The SMR and MAR sites are included in the Main Post Area description.

The SMR/MAR areas (although separate areas) include a 10-inch water line from the Main Post that supplies the Launch Complexes and Oro Grande area from the two 400,000 gallon ground storage tanks to the 200,000 gallon elevated tank at Launch Complex (LC) 38. A booster station then pumps water through a 10-inch line to the Oro Grande Range Camp and storage tanks on Elephant Mountain. The elevated storage structures are equipped with cathodic protection, depth indicators, warning systems, and altitude transmitters. The tanks have been recently overhauled and are in excellent condition.

Eleven potable wells serve the Main Post Area and collectively produce approximately 600 to 700 million gallons of water per year. Wells 10A and 15A have emergency back-up engines. Four potable wells and a booster station provide water from the Soledad Canyon region. The SMR area contains one submersible well rated at 85 gallons per minute (gpm). The MAR area contains three wells that feed the HELSTF region and one well used for fire protection as well as construction.

Treatment is accomplished through the raw water being pumped through a 60,000 gallon sedimentation tank. The tank has 12-inch inlets and outlets that are separated from the settling zone by steel baffle plates. Sludge is drawn off into a concrete trench, collected in a 10-inch line and drained to a dry wash. The water is then chlorinated and fluoridated before entering the ground storage tanks.

Water storage for the Main Post area is provided by five (5) storage tanks. A single 200,000, two (2) 400,000 and two (2) 1.0 million gallon tanks exist in this area. The structures are equipped with cathodic protection, depth indicator and warning systems, and altitude transmitters. All tanks have been overhauled in recent years and are in excellent condition.

J02.2.1.3 Rhodes Canyon Area

Water for the Rhodes Canyon Area is currently being supplied by truck to this area that presently does not have any active wells or treatment facilities. Water is stored in two (2) ground storage tanks. The Government has identified a project to construct a well in this area at a future date.

J02.2.1.4 Stallion Range

Water for the Stallion Range is pumped from two (2) wells. One well has a depth of 400 feet, while the other well's depth is 650 feet. Both wells are equipped with a submersible pump set at 400 feet. Both wells are 12-inches in diameter and produce approximately 90 gpm and 150 gpm respectively. Distribution pipeline is made up of predominantly 10-inch PVC pipeline.

Because of the high salt content, an ion-exchange plant treats the water at the Stallion Range to bring it to drinking quality. Plant capacity is 120,000 gallons per day (gpd) and comprises three independent units. Two (2) were installed in 1989 and the third in 1993.

Well water is pumped to the surface and flows by gravity into a 20,000 gallon raw water tank. After treatment, the water is pumped to a 150,000 gallon aboveground tank, from which it is boosted to a new 500,000 gallon aboveground storage tank on a nearby hill. An unused 100,000 gallon elevated storage tank exists in the area; however, the storage tank is not included in the inventory or this privatization action.

J02.2.1.5 Ground Water Wells

Table 1 details additional key information regarding WSMR's 21 active ground water wells which supply raw water to both the potable water and single non-potable water utility systems. The wells pumping capacities range from 350 to 1,200 gpm.

TABLE 1Ground Water Wells
Potable Water System – White Sands Missile Range, New Mexico

| Well No. | Location | Flow (gpm) | Casing Diameter (inches) | Depth | SEO Well No. | Year Constructed |
|----------|-----------|------------|--------------------------|-------|-----------------|---------------------|
| 22 | Main Post | 730 | 16 | 735 | T-688-S-12 | 1977 |
| 21 | Main Post | 800 | 16 | 700 | T-688-S-11 | 1977 |
| 20 | Main Post | 1,100 | 16 | 842 | T-688-S-9 | 1965 |
| 19 | Main Post | 1,200 | 16 | 903 | T-688-S-10 | 1965 |
| 18 | Main Post | 850 | 16 | 800 | T-688-S-8 | 1965 |
| 17 | Main Post | 800 | 14 | 900 | T-688-S-6 | 1961 |
| 16 | Main Post | 650 | 12 | 890 | T-688-S-5 | 1955 |
| 15A | Main Post | 1,100 | 16 | 733 | T-688-S-4 | 1985 |
| 13A | Main Post | 500 | 12.75 | 770 | T-04028 | 2003 |
| 11A | Main Post | 350 | 12.75 | 770 | T-03734 | 2002 |
| 10A | Main Post | 900 | 16 | 825 | T-688-S-7 | 1969 |
| SC2 | Main Post | 1,042 | 16 | 810 | T-680-07 | 1990 |
| SC3 | Main Post | 1,042 | 16 | 810 | T-680-07 | 1990 |
| SC4 | Main Post | 1,000 | 16 | 810 | SCT-1 | 1994 |
| SC5 | Main Post | 350 | 16 | 675 | SCT-4 | 1994 |
| SMR | SMR | 85 | 6 | 475 | T-2170 | 1992 |
| MAR 1 | MAR | 104 | 10 | 550 | T-1570-S | 1964 |
| MAR 2 | MAR | 107 | 10 | 650 | T-1570-S2 | 1964 |
| MAR 3 | MAR | 111 | 10 | 750 | T-1570-S4 | 1990 |
| SRC-2 | Stallion | 140 | 12 | 400 | | 1969 |
| SRC-3 | Stallion | 250 | 12 | 650 | | 1990 |

J02.2.1.6 Booster Pump Stations

The booster station in Building No. 375 comprises a high and a low-pressure system. The high-pressure side has four (4) pumps; one rated at 3,500 gpm, two (2) pumps at 2,400 gpm, and fourth pump at 1,800 gpm. Two of the pumps have emergency backup with gas operated auxiliary engines. All of the pumps are in excellent condition. The water system operates automatically by a Supervisory Control and Data Acquisition (SCADA) system, located in the maintenance building.

The Lower Range Booster Station consists of three pumps. Capacities range from 275 to 800 gpm. All of these pumps have new motors; some have new housing structures and all are in excellent condition.

Soledad Booster Station was constructed in the early 1990s and consists of three booster pumps with a capacity of 1,042 gpm, and a 20,000-gallon storage tank. There is no emergency backup system.

TABLE 2Booster Pump Stations
Potable Water System – White Sands Missile Range, New Mexico

| Location | Capacity (gpm) | Motor (HP) | Auxiliary Engine | Year Constructed |
|------------|----------------|---------------|--------------------|---------------------|
| Main Post | 1,800 | 125 | None | 1995 |
| Main Post | 2,400 | 200 | None | 1995 |
| Main Post | 2,400 | 200 | 150 HP propane | 1995 |
| Main Post | 3,500 | 250 | 303 HP natural gas | 1995 |
| Soledad | 1,042 | 150 | None | 1990 |
| Soledad | 1,042 | 150 | None | 1990 |
| Soledad | 1,042 | 150 | None | 1990 |
| LC-38 West | 275 | 30 | None | 1999 |
| LC-38 East | 275 | 30 | None | 1999 |
| LC-35 | 800 | 40 | None | 1997 |

J02.2.1.7 Potable Water Storage Tanks

Table 3 details additional key information regarding WSMR's water storage tanks located throughout the Installation.

TABLE 3

Potable Water Storage Tanks

Potable Water System – White Sands Missile Range, New Mexico

| Facility No. | Location | Year Installed | Year Rehabbed | Material Type | Gallons |
|--------------|-----------|----------------|---------------|---------------|-----------|
| 27171 | SMR | 1997 | 1997 | Fiberglass | 12,500 |
| S-28602 | MAR | 1998 | 1998 | Fiberglass | 20,000 |
| 19790 | Soledad | 1989 | | Steel | 25,000 |
| 22850 | LC-35 | 1946 | 1994 | Steel | 250,000 |
| 23635 | LC-38 | 1959 | 1994 | Steel | 200,000 |
| 374-A | Main Post | 1954 | 1994 | Steel | 400,000 |
| 374-B | Main Post | 1954 | 1994 | Steel | 400,000 |
| 379 | Main Post | 1959 | 1994 | Steel | 200,000 |
| 10258 | Main Post | 1965 | 1994 | Steel | 1,000,000 |
| 11280 | Main Post | 1959 | 1994 | Steel | 1,000,000 |
| 34257 | Stallion | 1997 | | Steel | 20,000 |
| 34263 | Stallion | 1994 | | Steel | 150,000 |
| | Stallion | 1997 | | Steel | 500,000 |

J02.2.1.8 Points of Demarcation

The point of demarcation is defined as the point on the piping system where ownership changes from the Grantee to the building owner. During the operation and maintenance transition period, concurrence on specific demarcation points will be documented during the joint inventory of facilities.

TABLE 4Points of Demarcation
Potable Water System – White Sands Missile Range, New Mexico

| Point of Demarcation | Applicable Scenario | Sketch |
|---|---|--------|
| Water meter, backflow device, or valve (closest apparatus to the exterior of the structure). | Water meter, backflow device, or valve is located on the service line entering the structure within 25 feet of the exterior of the structure. | Water |

| Point of Demarcation | Applicable Scenario | Sketch |
|-----------------------------|--|---|
| | No water meter, backflow device, or valve exists on the service line entering the structure. | Distribution → Pipe Service Line Structure Point of Demarcation Distribution → Pipe |

J02.2.1.9 Inventory

Table 5 provides a general listing of the major potable water system fixed assets for WSMR's potable water system included in the purchase. When not specifically identified by system drawings, the size and type of system components were estimated based on the size of the piping the component was connected to. Additionally when the year of construction was not known, it was estimated based on the age of the adjacent piping or the age of the facility served. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned herein, is considered part of the purchased system.

TABLE 5Fixed Inventory
Potable Water System – White Sands Missile Range, New Mexico

| Item | Size | Туре | Approximate Quantity | Unit | Approximate Year of Installation |
|-------------|-------|-------------------------|-------------------------|------|----------------------------------|
| Raw Water V | Wells | Well No. 10A, 900 gpm | 1 | Each | 1969 |
| | | Well No. 11A, 350 gpm | 1 | Each | 2002 |
| | | Well No. 13A, 500 gpm | 1 | Each | 2003 |
| | | Well No. 15A, 1,100 gpm | 1 | Each | 1985 |
| | | Well No. 16, 650 gpm | 1 | Each | 1955 |
| | | Well No. 17, 800 gpm | 1 | Each | 1961 |
| | | Well No. 18, 850 gpm | 1 | Each | 1965 |
| | | Well No. 19, 1,200 gpm | 1 | Each | 1965 |
| | | Well No. 20, 1,100 gpm | 1 | Each | 1965 |
| | | Well No. 21, 800 gpm | 1 | Each | 1977 |
| | | Well No. 22, 730 gpm | 1 | Each | 1977 |
| | | Well No. SC2, 1,042 gpm | 1 | Each | 1990 |
| | | Well No. SC4, 1,042 gpm | 1 | Each | 1990 |
| | | Well No. SC4, 1,000 gpm | 1 | Each | 1994 |

| Item | Size | Type | Approximate Quantity | Unit | Approximate Yea of Installation |
|-----------|-----------------|--------------------------------------|-------------------------|-------|---------------------------------|
| | | Well No. SC5, 350 gpm | 1 | Each | 1994 |
| | | SMR, 85 gpm | 1 | Each | 1992 |
| | | MAR1, 104 gpm | 1 | Each | 1964 |
| | | MAR2, 107 gpm | 1 | Each | 1964 |
| | | MAR3, 111 gpm | 1 | Each | 1990 |
| | | SRC2, 140 gpm | 1 | Each | 1969 |
| | | SCR3, 250 gpm | 1 | Each | 1990 |
| Water Tre | atment Plants | | | | |
| Main | Post WTP | 600,000 Gallon Sedimentation Tank | 1 | Each | 1993 |
| Stallic | on Range Center | Ion Exchange | 2 | Units | 1989 |
| Stallic | on Range Center | Ion Exchange | 1 | Unit | 1993 |
| Pipe | <2-inch | Polyvinyl Chloride | 872 | LF | 2003 |
| | <2-inch | Copper | 183 | LF | 1960 |
| | <2-inch | Galvanized Steel | 1,699 | LF | 1953 |
| | <2-inch | Unknown | 466 | LF | 1952 |
| | 2-inch | Asbestos Cement | 6,100 | LF | 1960 |
| | 2-inch | Cast Iron | 45 | LF | 1952 |
| | 2-inch | Galvanized Steel | 2,587 | LF | 1952 |
| | 2-inch | Polyvinyl Chloride | 6,647 | LF | 2001 |
| | 2-inch | Unknown | 1,659 | LF | 1952 |
| | 2-1/2-inch | Galvanized Steel | 311 | LF | 1960 |
| | 3-inch | Galvanized Steel | 242 | LF | 1952 |
| | 3-inch | Polyvinyl Chloride | 136 | LF | 2001 |
| | 3-inch | Unknown | 2,358 | LF | 1952 |
| | 4-inch | Asbestos Cement | 4,541 | LF | 1952 |
| | 4-inch | Cast Iron | 1,679 | LF | 1952 |
| | 4-inch | Galvanized Steel | 291 | LF | 1952 |
| | 4-inch | Polyvinyl Chloride | 2,011 | LF | 1997 |
| | 4-inch | Unknown | 1,192 | LF | 1952 |
| | 6-inch | Asbestos Cement | 103,858 | LF | 1952 |
| | 6-inch | Cast Iron | 27,307 | LF | 1952 |
| | 6-inch | Galvanized Steel | 1,693 | LF | 1952 |
| | 0 111411 | | | | |

| Item | Size | Туре | Approximate Quantity | Unit | Approximate Year of Installation |
|-------------|--------------------|------------------------------|-------------------------|------|----------------------------------|
| | 6-inch | Polyvinyl Chloride | 17,779 | LF | 2000 |
| | 6-inch | Unknown | 3,251 | LF | 1952 |
| | 8-inch | Asbestos Cement | 169,661 | LF | 1953 |
| | 8-inch | Cast Iron | 9,879 | LF | 1952 |
| | 8-inch | Steel | 603 | LF | 1952 |
| | 8-inch | Polyvinyl Chloride | 91,681 | LF | 2001 |
| | 8-inch | Unknown | 3,024 | LF | 1952 |
| | 10-inch | Asbestos Cement | 42,921 | LF | 1952 |
| | 10-inch | Cast Iron | 15,717 | LF | 1952 |
| | 10-inch | Galvanized Steel | 1,241 | LF | 1952 |
| | 10-inch | Polyvinyl Chloride | 41,294 | LF | 1993 |
| | 10-inch | Unknown | 2,781 | LF | 1952 |
| | 12-inch | Asbestos Cement | 22,040 | LF | 1952 |
| | 12-inch | Steel | 3,950 | LF | 1991 |
| | 12-inch | Polyvinyl Chloride | 56,421 | LF | 1999 |
| | 14-inch | Asbestos Cement | 6,800 | LF | 1952 |
| | 14-inch | Steel | 684 | LF | 1952 |
| | 16-inch | Asbestos Cement | 7,929 | LF | 1952 |
| | 16-inch | Polyvinyl Chloride | <u>53,632</u> | LF | 1991 |
| Total Pi | ipe | | 720,567 | LF | |
| Valves | <2-inch | Valve | 23 | Each | 1973 |
| | 2-inch | Valve | 72 | Each | 1975 |
| | 2-1/2-inch | Valve | 2 | Each | 1960 |
| | 3-inch | Valve | 3 | Each | 1952 |
| | 4-inch | Valve | 20 | Each | 1969 |
| | 6-inch | Valve | 266 | Each | 1963 |
| | 8-inch | Valve | 169 | Each | 1969 |
| | 10-inch | Valve | 2 | Each | 1952 |
| | 12-inch | Valve | 7 | Each | 1991 |
| | 16-inch | Valve | <u>3</u> | Each | 1991 |
| Total V | Total Valves | | | | |
| Building So | ervices (assume 10 | 00-feet of pipe per service) | 1,193 | Each | 1952 |
| Secondary | Meters | | 28 | Each | Unknown |
| Air Relief | Valves | | 29 | Each | 1980 |

| Item | Size | Туре | Approximate Quantity | Unit | Approximate Year of Installation |
|------------------------|---------------|----------------------------|----------------------|------|----------------------------------|
| Pressure Red Valves | ducing | | 19 | Each | 1959 |
| Position Ind | icator Valves | | 19 | Each | 1962 |
| Fire Hydran | ets | | 547 | Each | 1954 |
| Booster Pun | ip Stations | | | | |
| Main Pos | t No. 1 | 3 pumps, 125 HP, 1,800 gpm | 1 | Each | 1995 |
| Main Pos | t Nos. 2 & 3 | 3 pumps, 200 HP, 2,400 gpm | 2 | Each | 1995 |
| Main Pos | t No. 4 | 3 pumps, 250 HP, 3,500 gpm | 1 | Each | 1995 |
| Soledad N | Nos. 1, 2 & 3 | 3 pumps, 150 HP, 1,042 gpm | 3 | Each | 1990 |
| LC-38 W | est/East | 3 pumps, 30 HP, 275 gpm | 2 | Each | 1999 |
| LC-35 | | 3 pumps, 40 HP, 800 gpm | 1 | Each | 1997 |
| Ground Stor | age Tanks | 400,000 Gallon / Steel | 2 | Each | 1954/1994 |
| | | 500,000 Gallon / Steel | 1 | Each | 1997 |
| | | 150,000 Gallon / Steel | 1 | Each | 1994 |
| | | 250,000 Gallon / Steel | 1 | Each | 1946/1994 |
| | | 200,000 Gallon / Steel | 1 | Each | 1959/1994 |
| | | 25,000 Gallon / Steel | 1 | Each | 1989 |
| | | 20,000 Gallon / Steel | 1 | Each | 1997 |
| | | 20,000 Gallon / Fiberglass | 1 | Each | 1998 |
| | | 12,500 Gallon / Fiberglass | 1 | Each | 1997 |
| Elevated Sto | rage Tank | 1 Million Gallon / Steel | 1 | Each | 1965/1994 |
| | | 1 Million Gallon / Steel | 1 | Each | 1959/1994 |
| | | 200,000 Gallon / Steel | 1 | Each | 1959/1994 |

J02.2.2 Potable Water System Non-Fixed Equipment and Specialized Tools

Table 6 lists other ancillary equipment (spare parts), and **Table 7** lists specialized vehicles and tools included in the purchase. Offerors shall field-verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 6Spare Parts
Potable Water System - White Sands Missile Range, New Mexico

| Quantity | Item | Make/Model | Description | Remarks | |
|--|------|------------|-------------|---------|--|
| No spare parts for maintenance of the Installation's potable water system will be available to the new | | | | | |
| owner of the system. The Army does not maintain an inventory of spare parts for the system. | | | | | |

TABLE 7
Specialized Vehicles and Tools
Potable Water System - White Sands Missile Range, New Mexico

| Quantity | Item | Make/Model | Description | Remarks |
|----------|------|------------|-------------|---------|
| ~ | | | | |

No specialized vehicles for maintenance of the Installation's potable water system will be available to the new owner of the system. The Army does not maintain an inventory of specialized vehicles for the system.

J02.2.3 Potable Water System Manuals, Drawings, and Records

Table 8 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 8Manuals, Drawings and Records

Potable Water System - White Sands Missile Range, New Mexico

| Quantity | Item | Description | Remarks | |
|---|------|-------------|---------|--|
| Available manuals, drawings, records, and reports included in the Technical Library will be | | | | |

Available manuals, drawings, records, and reports included in the Technical Library will be transferred with the system.

J02.3 Specific Service Requirements

The service requirements for the Installation's potable water system are as defined in Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the potable water system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

J02.3.1 Excavation Marking/Digging Process

J02.3.1.1 Contractor Participation in Digging Permit Process

The Contractor shall subscribe to the regional process for notification and marking of underground utilities. The Contractor shall mark all utilities in the time windows defined by this process. In some cases, where non-metallic lines do not have tracer wires, it may take longer to locate the lines. In these cases, the Contractor will make necessary notifications about a possible delay in the marking process. The Contractor shall be responsible for all repairs, costs, and damages due to excavations by others for which he did not properly mark his utilities as part of the utility marking process. Generally, utility lines will be marked with pin flags or spray paint.

J02.3.1.2 Contractor Excavation Requirements

The Contractor shall notify the regional one-call dispatch center of his digging requirement. The Contractor shall also obtain digging permits from the Installation before any drilling, digging, or excavation is undertaken. Permits will identify all underground utilities within five feet of the designated area. Since utility marking is an inherently imprecise process, excavation within five feet of the marked utilities will be done by hand. The Contractor shall be responsible for all repairs,

costs, and damages due to his excavations that fail to comply with the DPW digging permit process and the requirements listed herein; this includes excavations extending beyond areas that have been cleared for excavation.

J02.3.2 Emergency Response

Because of the critical nature of many mission requirements, response to utility emergencies must be immediate. The Contractor will respond with a knowledgeable individual to emergency utility problems within 30 minutes of notification during duty hours and within 2 hours during non-duty hours. Additionally, repair crews must be on scene within one hour during duty hours and within two hours during non-duty hours.

J02.3.3 Restricted Access

The Contractor shall coordinate and obtain approval for restricted area access.

J02.3.4 Crisis Situations

IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by the Base Operations (BaseOps) Office at (505) 678-1116 during duty hours and (505) 678-1116 during non-duty hours for exercises and crisis situations. The Contractor shall submit Emergency Response Plans for approval by the Government for all exercise and crisis situations IAW Paragraph C.9.8.

J02.4 Current Service Arrangement

Currently, all of the Installation's water requirements are supplied by ground water wells located on the Installation. Alternate pumping is exercised to maintain natural water zones. Pumping quantities are closely monitored to observe the recharge rate and to not deplete the static water level.

J02.5 Secondary Metering

Between the well head and the end-user points of demarcation, the Contractor shall own the existing meters and shall install additional meters at new and upgraded locations as directed by the Contracting Officer. The Contractor shall install or cause to have installed utility meters as requested by the Contracting Officer in keeping with the guidance in Paragraph C.3.3

The Installation requires secondary meters for internal billings of their reimbursable customers, utility usage management, and water conservation monitoring. The Offeror shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3, *Future Secondary Meters*. The Offeror shall provide meter readings once a month for all secondary meters IAW Paragraph C.3. The Offeror shall install and calibrate new secondary meters IAW Paragraph C.13, *Operational Transition Plan*. After installation, the Offeror shall maintain and read these meters IAW Paragraph C.3.

J02.5.1 Existing Meters

Table 9 lists the existing (at the time of contract award) meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraphs C.3.3 *Metering* and J02.6, *Monthly Submittals*.

TABLE 9Existing Secondary Meters
Potable Water System – White Sands Missile Range, New Mexico

| Count | Facility No. | Down Range Only |
|-------|--------------|--------------------------------------|
| 1 | 120 | Cafeteria |
| 2 | 260 | PX |
| 3 | 262 | Commissary |
| 4 | 270 | PX Service Station |
| 5 | 272 | Child Care Center |
| 6 | 290 | School |
| 7 | 335 | Cox Range Control Center |
| 8 | 445 | Recreational Equipment Facility |
| 9 | 460 | Shower Room for Swimming Pool |
| 10 | 460 | Swimming Pool |
| 11 | 506 | Guest House |
| 12 | 1316 | Youth Center |
| 13 | 1407 | OTD |
| 14 | 1430 | Auto Crafts Shop |
| 15 | 1431 | Car Wash |
| 16 | 1532 | CAL Lab |
| 17 | 1549 | Tech Area Boiler House |
| 18 | 1550 | GM Facility |
| 19 | 1855 | ARL |
| 20 | 21695 | MTD |
| 21 | (*) | Family Housing Area Master Meter MTD |
| 22 | 357 | New Mexico Army National Guard |

| Count | Facility No. | Down Range Only |
|-------|--------------|---------------------------------------|
| 23 | 200 | Museum |
| 24 | 203 | V-2 Bldg |
| 25 | 465 | Professional Development Center |
| 26 | 882 | C-Martin Company |
| 27 | 530 | McAfee Health Clinic (Boilers) |
| 28 | 1549 | Central Steam Heating Plant (Boilers) |

^(*) Southeast corner of Headquarter & Aberdeen Avenues

J02.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 10**. New secondary meters shall be installed IAW Paragraphs C.3.3.1, *Future Meters*, and C.13, *Operational Transition Plan*. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3.3, *Metering* and J02.6, *Monthly Submittals* below. At the present time, the Installation does not require any new meters to be installed; however, new and fully renovated buildings will require secondary meters. On an as needed basis, the Offeror shall also provide and install meters for the duration of various U.S. Army Corps of Engineers construction projects. Regarding metering requirements for the U.S. Army Corps of Engineers construction projects, the WSMR Utilities Services Office will contact the Offeror to advise of meter location and when to initiate meter readings.

TABLE 10
New Secondary Meters
Potable Water System – White Sands Missile Range, New Mexico

| | Facility | Building No. | Square Footage |
|------|----------|--------------|----------------|
| None | | | |

J02.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. **Invoice.** (IAW Paragraph G.2, *Submission and Payment of Invoices*). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. The Contractor shall provide sufficient supporting documentation with each monthly invoice to substantiate all costs included in the invoice for each CLIN as approved by the Contracting Officer. The proposed system of accounts shall be made available in electronic format as directed by the Contracting Officer. Invoices shall be submitted by the 10th of each month for the previous month. Invoices shall be submitted to:

Name: Contracting Officer (or his designee as stipulated at time of award)

Address: Directorate of Contracting

Bldg. 143, 2nd Floor

Army Contracting Agency, Southwest Region White Sands Missile Range, NM 88002

Phone number: (to be provided at time of award)

2. **Outage Report.** The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 10th of each month for the previous month. Outage reports shall be submitted to:

Name: Contracting Officer (or his designee as stipulated at time of award)

Address: Directorate of Contracting

Bldg. 143, 2nd Floor

Army Contracting Agency, Southwest Region White Sands Missile Range, NM 88002

Phone number: (to be provided at time of award)

3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month's readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. The Contractor shall contact the WSMR Utilities Services Office for a meter reading schedule during the first week of December for the following calendar year. Specific water system data required by the WSMR Utility Services Office to compute annual water rates for charging reimbursable customers will be provided by the Contractor Quarterly (i.e. Jan – Mar, Apr – Jun, Jul – Sep, Oct – Dec). Meter reading reports shall be submitted by the 10th of each month for the previous month. Meter reading reports shall be submitted to:

Name: Ms. Alicia Gray

Address: Directorate of Installation Support

Bldg. 102

Regulatory Compliance & Energy Office White Sands Missile Range, NM 88002

Phone number: (to be provided at time of award)

J02.7 Energy and Water Conservation Projects

IAW Paragraph C.3.4, *Energy and Water Efficiency and Conservation*, the following projects have been implemented by the Government for conservation purposes.

• None identified

J02.8 Service Area

IAW Paragraph C.4, *Service Area*, the service area is defined as all areas within the boundaries of the Installation.

J02.9 Off-Installation Sites

As described in earlier paragraphs, there are no off-site installations / facilities included in this privatization action.

J02.10 Specific Transition Requirements

IAW Paragraph C.13, *Operational Transition Plan*, **Table 11** provides a list of service connections and disconnections required upon transfer.

TABLE 11

Service Connections and Disconnections

Potable Water System – White Sands Missile Range, New Mexico

| Location | Description |
|----------|-------------|
| None | |

J02.11 Government Recognized System Deficiencies

Table 12 provides a list of Government recognized deficiencies. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the potable water system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. The Offeror shall make a determination as to its actual need to accomplish and the timing of any and all such deficiency remedies.

Physical and functional deficiencies may require capital to be invested in the system. If any deficiency remedy requires a capital upgrade project, the capital upgrade project shall be proposed according to the following:

- Capital upgrade projects required to bring the system to industry standards shall be proposed under Schedule 3 Initial Capital Upgrade(s)/Connection Charge(s).
- Capital upgrade projects required to replace system components shall be proposed in the first years of Schedule 2 – Renewals and Replacements – 50-Year Schedule, and the cost factored into Schedule 1 – Fixed Monthly Charge, for renewals and replacements, as part of CLIN AA.
- Transition costs shall be proposed as a one-time cost and shall be treated similar to a capital project and included in Schedule 3 Initial Capital Upgrade(s)/Connection Charge(s).
- Improvements proposed in the operational component of the work shall be included in Schedule 1 Fixed Monthly Charge as part of CLIN AA.

TABLE 12

System Deficiencies

Potable Water System - White Sands Missile Range, New Mexico

| Work Request Description | Location |
|--------------------------|----------|
| | |

| Work Request Description | Location |
|---|--------------------------------|
| Install Repair/Replace Backflow Preventors | |
| Repair/Replace Backflow Preventors | |
| Install Chlorine Booster Station | |
| Replace Water Line Soledad Booster Station (Note 1) | |
| Rehabilitate Water Well | Well 10A |
| Replace Chlorination/Fluoride System | |
| Rehabilitate Service Well No. 2 | |
| Install New Water Tank MAR | |
| Replace Main Line Valves | |
| Replace Water Maintenance Building | Water Plant Area |
| Replace Engine in Water Plant | |
| Replace Main Line Pressure Reduce Valve | |
| Inspect and Rehabilitate Water Storage | |
| Replace Water Lines | Oro Grande Area |
| Replace Booster Pumps | Soledad Booster Station |
| Rehabilitate Soledad Well No. 2 | Soledad Well #2 |
| Replace Water Lines | Motor Vehicle Maintenance Area |
| Rehabilitate Soledad Well No. 3 | Soledad Well #3 |
| Replace Water Lines | NED Area |
| Replace Water Lines | Honest John Assembly Area |
| Demolish Elevated Water Tank (Note 1) | |
| Replace Water Lines | Navy Area |
| Install Water Tank | Soledad Booster Station |
| Replace Water Lines | Warehouse Area |
| Replace Water Lines | AMRAD Area |

Note 1 - These projects are approved and funded and will be completed prior to the potential privatization.